

# CLAIMS

1. A process for the production of a fat composition suitable as confectionery fat or as bakery fat, characterised in that a starting fat composition containing palm oil or a palm oil fraction and having the following composition

(1) a glyceride composition with

- a  $S_2U$  content between 47 and 75 wt. %,
- a  $SU_2 + U_3$  content < 40 wt. %,
- a  $S_3$  content between 1 and 15 wt. %,
  - a diglyceride content of 3 to 12 wt. %,
    - the glyceride contents being expressed as wt. % with respect to the total amount of di-and triglycerides

in which S means a saturated fatty acid with a hydrocarbon chain length of 14-24 carbon atoms and U means unsaturated fatty acid with a hydrocarbon chain length of 14-24 carbon atoms and

(2) a total content of unsaturated fatty acids of less than 55 wt. %, preferably less than 50 wt. %, more preferably less than 48 wt. %,

is subjected to a catalytic hydrogenation so as to obtain a first fat with a trans fatty acid content < 15 wt. %, preferably < 10 wt. %, most preferably < 5 wt. % and an increase of C18-0 of less than 1 wt. %, preferably less than 0.7 wt. %, more preferably less than 0.4 wt. %, and in that the first fat is incorporated in the fat composition.

2. The process of claim 1, characterised in that the starting fat composition has a glyceride composition with

1. a  $S_2U$  content between 50-70 wt. %, preferably between 53-65 wt. %,
2. a  $SU_2 + U_3$  content between 15- 35 wt. %, preferably between 20-32 wt. %
3. a  $S_3$  content of between 1.5 and 12 wt. %, preferably 2 and 10 wt. %, most preferably between 2.5-7 wt. %.

3. The process of claim 1 or 2, characterised in that the starting fat composition contains a palm oil fraction obtained through fractionation of palm oil or a fraction thereof, the fractionation being either a dry fractionation or detergent fractionation. 4. The process of any one of claims 1-3 characterised in that the hydrogenation reaction is continued until a fat

composition is obtained with a difference in iodine value before and after hydrogenation of less than 10, preferably less than 5.

5           5. The process of any one of claims 1-4, characterised in that the hydrogenation reaction is carried out in the presence of a non trans specific Ni-containing hydrogenation catalyst.

6. The process of any one of claims 1-5, characterised in that the hydrogenation reaction is carried out at a temperature ranging between 160-225°C.

10           7. A fat composition obtainable with the method of any one of claims 1-6, characterised in that the fat composition has a difference in SFC at 20°C versus 35°C of more than 35%, preferably more than 40%, the SFC being measured according to IUPAC method 2.150 a.

15           8. A fat composition as claimed in claim 7, characterised in that the fat composition has a crystallisation time at 15°C of less than 15' to reach 50% of its SFC measured at 15°C.

9. A fat composition as claimed in claim 8, characterised in that the fat composition is a non-temper fat.

20           10. A fat composition as claimed in anyone of claims 7 - 9, characterised in that the composition contains 1-100 wt% of the first fat and 99-0% of a second fat, the second fat having a trans fatty acid content of less than 10 wt. %, preferably less than 5 wt. %.

11. A fat composition as claimed in claim 10, characterised in that the second fat is a non-hydrogenated fat.

25           12. A fat composition as claimed in claim 10 or 11, characterised in that the second fat has an SFC at 30°C of less than 7% and at 35°C of less than 4%.

13. A fat composition as claimed in any one of claims 10 -12, characterised in that the second fat is a palm fraction or a liquid oil.

30           14. A fat composition as claimed in any one of claims 10 -13, characterised in that the second fat is a palm fraction with an iodine value above 40, preferably > 45, most preferably > 50.

15. Use of the fat composition obtainable with the process of any one of claims 1-6, or a fat composition according to any one of claims 7-14 for the preparation of a confectionery product..

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16. A confectionery product containing the fat composition obtainable with the process of any one of claims 1-6, or a fat composition according to any one of claims 7-14.

5 17. A confectionery product as claimed in claim 16, characterised in that the confectionery product is selected from the group of a filling and a cream.

18. A confectionery product as claimed in claim 16, characterised in that the confectionery product is a caramel.

10 19. A water-in-oil emulsion containing 20-85% of fat, characterised in that the fat contains an amount of the fat composition obtainable with the process of any one of claims 1-6, or a fat composition according to any one of claims 7-14.

20. Use of a water-in-oil emulsion according to claim 19 in baking applications.

15 21. A bakery dough containing an amount of a fat composition obtainable with the process of any one of claims 1-6, or a fat composition according to any one of claims 7-14, and/or a water-in-oil emulsion according to claim 19.

20 22. Baked product obtained by baking a dough containing a fat composition obtainable with the process of any one of claims 1-6, or a fat composition according to any one of claims 7-14.

23. A confectionery coating fat containing a fat composition obtainable with the process of any one of claims 1-6, or a fat composition according to any one of claims 7-9.

25 24. A confectionery coating fat according to claim 23, characterised in that the coating fat contains minimum 15 wt %, preferably more than 20 wt % and maximum 100 wt. %, preferably less than 85 wt. %, more preferably less than 75 wt. % of the fat composition obtainable with the process of any one of claims 1-6 or the fat composition according to any one of claims 7-9.

30 25. A confectionery coating fat as claimed in claim 24, characterised in that the fat comprises an amount of an additional fat having a solid fat content at 20°C of at least 50%, preferably at least 60%.

26. A confectionery coating fat as claimed in claim 25, characterised in that the fat comprises an amount of an additional fat obtained

through hydrogenation, fractionation or interesterification, or a combination thereof and whereby this additional fat is a non-lauric fat.

27. A confectionery coating or tablet containing the confectionery coating fat claimed in any one of claims 23-26.

5 28. A confectionery fat for hard centres, containing the fat composition obtainable with the process of any one of claims 1-6, or a fat composition according to any one of claims 7-9.

10 29. A confectionery fat for hard centres, as claimed in claim 28, characterised in that the fat contains less than 25 wt. % with respect to the total amount of glycerides present in the fat, preferably less than 15 wt. %, most preferably less than 10 wt. % of trans fatty acids.

30. A confectionery hard centre containing the confectionery fat according to claim 28 or 29.